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## 2. ON THE INCREASING OCCURRENCE OF TYPICALLY PLAINS-BIRDS IN THE KUMAON HILLS

For many years now, I have been bird-watching in the Lake region of Kumaon, comprising the five lakes of Sattal, Naukuchiatal, Bhimtal, Khurpatal and Nainital as well as the surrounding hills. The area under observation extends from 1286 m (4220') which is the level of the Sattal lakes, to 2591 m (8500'), the height of Cheena Peak above Nainital, and has direct access to the plains by means of several steep river valleys.

In the fifties and early sixties I had made a detailed list of the birds occurring in the area with some notes on distribution, status and habitat. but since 1964 I have been abroad, returning to India about once every two years for a month or two, generally in winter and early spring. During each visit, I have made new entries in my list, of birds not observed before in the area. Surprisingly almost all of the 'new' birds are typical low-elevation species, no new records of high-elevation species having been made during the same interval. A list of these birds that have now become resident in the area is given below:

- 1. Purple Sunbird Nectarinia asiatica. Although this bird is known to ascend to 5000' in the Himalayas (Whistler 1941) it is mentioned here as its status has changed from that of a scarce summer visitor to a common resident at Bhimtal, 4340' (1320 m).
- 2. Crowpheasant Centropus sinensis. This bird is also known to occur up to 6000' (1830 m), but whereas it had never been observed in the Lake Region before, a pair have now taken up residence at the headquarters of the Bhimtal lake.
- 3. Blackwinged Kite Elanus caeruleus. This is also a low-elevation bird that was only rarely seen before, but now regularly breeds at Bhimtal. It is however, not resident, being only rarely seen in winter.

- 4. Grey Partridge Francolinus pondicerianus. A party of these birds has been resident at Mehragaon above Bhimtal for many years, and are not newcomers like the others. However, this is probably a new altitudinal record, as both Whistler (1941) and Sálim Ali (1946) give 1500' as the height to which this bird ascends in the Himalayas and Mehragaon is situated at 4500' (1370 m).
- 5. Whitebreasted Waterhen Amaurornis phoenicurus. This bird was first observed in 1962 at Bhimtal. Since then observations were sporadic, although it was also seen at Naukuchiatal, 4240' (1292 m). Since about 1969 it has firmly established itself at both these lakes and is now a common resident having displaced the Waterhen (Gallinula chloropus) to some extent in the process. According to Whistler (1941), it does not ascend the hill ranges.
- 6. Paddybird Ardeola grayii. It was first observed at Bhimtal in the winter of 1969/70. Now a pair has taken up residence and are reported to breed there.
- 7. Cattle Egret Bubulcus ibis. This is the most spectacular of the 'new arrivals', as they are so conspicuous. Three of these herons first arrived at Bhimtal in 1970. They were almost always to be seen in the stretch of partly cultivated land, swampy in some places, to the north of Bhimtal, occasionally visiting either Sattal or Naukuchiatal. Now their numbers have increased to a flock of about 12 birds that roost every night in the tall Eucalyptus trees bordering the Bhimtal lake. According to my brothers, they not only breed here but there is another flock of about 12 birds also in the area. Both Whistler and Sálim Ali (1941 & 1946) state that this is a plains bird not found in the hills.

All the birds mentioned above are now conspicuous resident birds that have definitely not escaped observation before. There is therefore not the slightest doubt that these birds are newcomers to the area and have become residents since about 1969. Two other low-elevation species have also been sighted here recently, but I presume that they were stray specimens. The Coppersmith Megalaima haemacephala) and the Blackheaded Oriole (Oriolus xanthornus). A solitary specimen of the former was observed in January 1972 above Bhimtal at 1475 m (4800'). Sálim Ali (1946) and Whistler give 2500' (762 m) and 3000' (915 m) respectively as the height this species ascends to in the Outer Himalayas. A Black-headed Oriole in juvenile plumage was collected at Bhimtal in December 1970.

From the above data one can conclude that many low-elevation species have started extending their range to higher elevations during the past few years. Other observations in the same area support this view. The Green Bee-eater (*Merops orientalis*) has become fairly common now

at Bhimtal, where it was formerly a rare straggler. The Blossomheaded Parakeet (*Psittacula cyanocephala*) is also no longer a scarce summer visitor but a common resident at Bhimtal.

On the other hand, high-elevation species such as the Red-crowned Jay (Garrulus bispecularis)—formerly a regular winter visitor to the Bhimtal/Sattal region and now absent for some years—and the various Thrushes such as the Greywinged Blackbird (Turdus boulboul), the Greyheaded Thrush (Turdus rubrocanus) and Tickell's Thrush (Turdus unicolor)—formerly very common in winter and now rarely seen—have definitely undergone a change in status here. Another surprising development in this connection is the rapid decline of the Chukor (Alectoris graeca) in areas where it once used to be plentiful. The barren hill slopes above Bhimtal and Sattal used to resound to its calls but since the past five or six years it has been neither seen nor heard. No explanation can be given for its disappearance, as its former habitat has not changed and to my knowledge it has been neither hunted nor trapped.

I am unable to give any definite reasons why the abovementioned birds have started extending their range to higher elevations. There has not been any major change in habitat during the past few years and the slow but steady denudation of forests in the hills does not seem to have been accelerated. This denudation however, is not so much due to felling of trees as it is to lopping for fodder and fuel and grazing by cattle and goats, which reduces trees to 'tooth-picks' and prevents any new growth from coming up. Such a forest is one only by name and not by function. It is possible that this type of deforestation has had at least some effect on the climate of the area, as rainfall at Nainital has gone down from the customary 2700 mm to about 2000 mm per year. Of course these 'changes' in climate are much too short-term to be taken seriously yet as they could very well be temporary variations caused by other factors; however, this extension of range by the abovementioned birds, could indeed be interpreted as further evidence that the climate in these hills is undergoing a slow change.

Of course, one could also conjecture that due to various reasons, conditions in the surrounding plains have become less attractive to the birds in question and thus forced some of the birds to 'take to the hills'. This argument is weakened by the fact that the new arrivals seem to thrive here and do not give the impression of being reluctant immigrants.

It would therefore be very interesting to find out whether similar changes have also been observed in the bird population of other hill-stations and if so what explanations can be put forward there.

No noticeable change has been observed in the butterfly population of the region, on which we are also keeping a close watch. However, butterflies, not being as conspicuous as birds, could escape notice if new species begin establishing themselves. Besides, they are generally bound to specific food-plants and would therefore take longer than birds to establish themselves in a new area. Of course, this only applies to butterflies that do not migrate or wander about a great deal.

It is my sincere hope that these 'new developments' within the bird community are not an indication of other, more profound changes to come in the ecology of the area. Even a slight change in climate would be disastrous to the fruit orchards, as the temperate fruit trees growing at lower elevations such as apples, plums and apricots would suffer. What makes the new development so important is the number of species involved, all occupying more or less separate ecological niches.

A much more detailed and thorough study of the above phenomenon is necessary before any firm conclusions can be drawn and then it would be wise to carry out such an investigation within the framework of the general ecology of the area. As neither my family members nor I am in a position to undertake further studies of this phenomenon yet, it was my aim to draw the attention of others to what is perhaps a new problem.

'THE RETREAT',
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April 30, 1973.

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## 3. TAWNY EAGLE AS A SCAVENGER

Eagles are rare birds. They are not common in and around busy cities. Yet a place about three miles south-west of Poona offers a spectacle probably uncommon in any part of the country. On view here is a 200-strong contigent of Tawny Eagles (Aquila rapax).

The Tawny Eagle is known to be a scavenger and an opportunist. Its opportunistic behaviour is best seen at this place where waste material from a chicken-dressing plantprovides it with regular and easily obtainable food. Abundant food supply has attracted a large number of eagles who feed in the early morning and then spend the day perched on nearby trees and hill-sides. They are well-accustomed to human presence. I have approached them quite close for photography. Their number has apparently deterred vultures.

By their habits birds of prey are solitary creatures. But in this case plentiful food supply has probably reversed this natural tendency. The